

09/710390

In the Claims:

Cancel claims 18-22 and add claims 23:

1-22. (Cancelled).

23. (New). High-speed shears for transverse cutting of a rolled strip comprising:

an upper blade support formed as a beam bridge having a relatively large diameter and carrying a first blade and having a shaft stub on each of opposite longitudinal sides thereof;

a lower blade drum having a comparatively small diameter and carrying a second blade;

means for permanently rotationally connecting the beam bridge with the lower drum and having two synchronization tooth gears fixedly connected with the beam bridge and the blade drum, respectively, having different pitch circle diameters corresponding roughly to diameters of respective blades, and engaging each other substantially backlash-free, the first

and second blades cooperating with each other in a predetermined cutting position of the beam bridge and the lower blade drum for cutting the rolled strip;

two pinch-roller sets located in front of and behind the beam bridge and the blade drum, respectively, for advancing the rolled strip under longitudinal tensioning through a gap between the beam bridge and the blade drum; and

roller means for supporting the tensioned strip and providing for lifting of the strip before passing of the second lower blade and for lowering the strip before passing of the first upper blade through the blade gap,

wherein in order to at least minimize the backlash, the tooth gear associated with the blade drum is divided in two gear portions, and the shear further comprises bolt means for securing the two gear portions in a predetermined angular position with respect to each other,

wherein a number of x-revolutions of the beam bridge corresponds to a number y-revolutions of the blade drum so that the beam bridge and the

blade drum are brought into the cutting position after different but finite number of the x-revolutions of the beam bridge and the y-revolutions the blade drum.